Workshop 4: SEM Stereo Imaging and 3D Reconstruction for Metrology: A Total Hands-on Workshop

The purpose of this workshop is to call the attention of our user community about an extraordinary, and largely underutilized, metrology tool available in the CFN. Alicona's MeX surface metrology software, installed in our CFN's Analytical SEM (JEOL 7600F), converts our SEM into a true surface metrology device. The workshop will review the technique of stereo imaging as applied to the SEM and present a workflow for acquiring reproducible, high quality stereo image sets. The MeX application will be used to create Digital Elevation Models (DEM) from the stereo image sets and examples will be presented that illustrate the measurement of profiles, texture, surface area and volume. The hands-on segment of the workshop consists of two groups: Group A will acquire, create and measure two projects on the SEM, and group B will focus on offline 3D analysis of sets of images previously obtained in the SEM.

Monday May 23, 2016
(CFN Building 735, Small Conference Room B in 2nd floor)

2:30 PM-3:20 PM	Jack Mershon (Tescan) *"SEM Stereo Imaging and 3D Reconstruction for Metrology"*	
3:20 PM-3:40 PM	Coffee Break + Group Photo	
3-40 PM-4:15 PM	Jack Mershon (Tescan) and Fernando Camino (BNL) *"Acquisition of SEM Stereo Images (with a JEOL 7600F SEM) for 3D Metrology Analysis in MeX"* **Hands-On Session 1** **(Group A, lab 1L35)**	Mikala Shremshock (Alicona) *"Offline 3D Analysis of Stereo Images in MeX"* **Hands-On Session 1** **(Group B, Conf. Room B)**
4:15 PM-4:50 PM	**Hands-On Session 2** **(Group A, lab 1L35)**	
4:50 PM-5:25 PM	**Hands-On Session 3** **(Group A, lab 1L35)**	**Hands-On Session 2** **(Group B, Conf. Room B)**
5:25 PM-6:00 PM	**Hands-On Session 4** **(Group A, lab 1L35)**	
6:00 PM	Workshop adjourns	